

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for manufacturing a tissue section, which is used for a sample for observation by a microscope, comprises the steps of:

slicing an organism specimen along a slicing surface in an atmosphere of air, whose form has a form of the organism specimen having been fixed by freezing or by using an embedding agent, in air, along a slicing surface;

adjusting a distance between the slicing surface of the organism specimen and one side of a film and a temperature difference between the organism specimen and the film when the slicing of the organism specimen is started, thereby a tip part of the tissue section curling to the outside of the slicing surface of the organism specimen is allowed to adhesively abut on one side of the film running apart from the slicing surface of the organism specimen; and

running the film at a speed in synchronism with a slicing speed of the tissue section after the tip part of the tissue section is allowed to adhesively abut on the one side of the film, thereby the entire tissue section cut off from the organism specimen can be adhered onto the one side of the film.

2. (Withdrawn) The method according to claim 1, wherein the temperature difference between the organism specimen and the film is adjusted by adjusting temperature of the film and/or temperature of an atmosphere, in which the organism specimen is sliced.

3. (Original) The method according to claim 1, wherein temperature of the film is adjusted to temperature, at which a part of an ice or the embedding agent for fixing the form of the organism specimen melts and the tissue section is adhered onto the film.

4. (Withdrawn) The method according to claim 1, wherein temperature of an atmosphere, in which the organism specimen is sliced, is adjusted so as to hold the fixed form of the organism specimen.

5. (Original) The method according to claim 1, wherein a plurality of rollers including a close roller, which is provided nearest to the slicing surface of the organism specimen, are provided in a film running path, and the distance between the slicing surface of the organism specimen and the one side of the film is adjusted by moving the close roller to and away from the slicing surface of the organism specimen.

6. (Original) The method according to claim 5, wherein a center of the close roller is moved on a bisector line of an intersection angle between a line extended from a cutting

surface of a cutting tool, which intersects a line extended from the slicing surface of the organism specimen, and the line extended from the slicing surface of the organism specimen.

7. (Original) The method according to claim 1, wherein the film running speed with respect to the slicing speed of the tissue section is adjusted so as not to form creases in the tissue section and break the tissue section.

8. (Original) The method according to claim 1, wherein ratio (V_t/V_s) of the film running speed (V_t) to the slicing speed (V_s) of the tissue section is 1.2-0.8.

9. (Original) The method according to claim 1, wherein the film is a transparent film.

10. (Currently Amended) A device for manufacturing a tissue section, which is used for a sample for observation by a microscope, comprising:

means for slicing an organism specimen along a slicing surface in an atmosphere of air, whose form has a form of the organism specimen having been fixed by freezing or by using an embedding agent, ~~in air, along a slicing surface~~; and

means for running a film apart from the slicing surface of the organism specimen;

means for adjusting a distance between the slicing surface of the organism specimen and one side of the film so as to make a tip part of the curling tissue section contact with the

outside of the slicing surface of the organism specimen when the slicing of the organism specimen is started;

means for adjusting temperature between the organism specimen and the film so as to make the tip part of the tissue section, which has been contacted the outside of the film, adhesively abut on the film; and

means for synchronizing a slicing speed of the tissue section, whose tip part has been adhered on the one side of the film, and a running speed of the film so as to adhere the entire tissue section cut off from the organism specimen onto the one side of the film.

11. (Withdrawn) The device according to claim 10, wherein said temperature adjusting means adjusts temperature of the film and/or temperature of an atmosphere, in which the organism specimen is sliced.

12. (Original) The device according to claim 10, further comprising means for adjusting temperature of the film to temperature, at which a part of an ice or the embedding agent for fixing the form of the organism specimen melts and the tissue section is adhered onto the film, said temperature adjusting means being provided in a film running path.

13. (Withdrawn) The device according to claim 10, further comprising means for adjusting temperature of an atmosphere, in which the organism specimen is sliced, so as to hold the fixed form of the organism specimen.

14. (Original) The device according to claim 10, wherein said distance adjusting means has a plurality of rollers, which are provided in a film running path and which include a close roller provided nearest to the slicing surface of the organism specimen, and the close roller is capable of moving to and away from the slicing surface of the organism specimen.

15. (Original) The device according to claim 14, wherein a center of the close roller is moved on a bisector line of an intersection angle between a line extended from a cutting surface of a cutting tool, which intersects a line extended from the slicing surface of the organism specimen, and the line extended from the slicing surface of the organism specimen.

16. (Original) The device according to claim 10, wherein said synchronizing means has a control section, which controls said running means and said slicing means to adjust the film running speed with respect to the slicing speed of the tissue section so as not to form creases in the tissue section and break the tissue section.

17. (Original) The device according to claim 16, wherein the control section controls said running means and said slicing means so as to make ratio (V_t/V_s) of the film running speed (V_t) to the slicing speed (V_s) of the tissue section 1.2-0.8.

18. (Previously Presented) The device according to claim 10, wherein the film is a transparent film.

19. (New) A method for manufacturing a tissue section, which is used for a sample for observation by a microscope, comprising the steps of:

slicing an organism specimen along a slicing surface, with a knife having a front end part whose one side face is formed into an angled surface, in an atmosphere of air, a form of the organism specimen having been fixed by freezing or by using an embedding agent;

adjusting a shortest distance between a close roller, which can be moved toward the slicing surface of the organism specimen and which guides a film running apart from the slicing surface, and a slice starting point, at which a front end of the angled surface of the knife contacts the slicing surface of the organism specimen at a prescribed angle and starts the slicing, by moving a center of the close roller to and away from the slice starting point, thereby a tip part of the tissue section curling to an outside of the slicing surface of the organism specimen is allowed to contact one side of the film when the slicing of the organism specimen is started;

adjusting temperature between the organism specimen and the film so as to make the tip part of the tissue section, which has been contracted the outside of the film, adhesively abut on the film; and

running the film at a speed in synchronism with a slicing speed of the tissue section so as to adhere the entire tissue section cut off from the organism specimen onto the one side of

the film with slicing the tissue section, whose tip part has been adhered on the one side of the film, by moving the organic specimen, in a prescribed direction, in a state of holding the close roller and the knife at prescribed positions.

20. (New) A device for manufacturing a tissue section, which is used for a sample for observation by a microscope and which is formed by slicing an organism specimen, whose form has been fixed by freezing or by using an embedding agent, along a slicing surface in an atmosphere of air, comprising:

a knife for slicing the organism specimen along the slicing surface, the knife having a front end part whose one side face is formed into an angled surface;

means for running a film, which is guided by a close roller capable of moving to and away from the slicing surface of the organism specimen, apart from the slicing surface of the organism specimen;

means for adjusting a shortest distance between the close roller, which can be moved toward the slicing surface of the organism specimen which guides a film running apart from the slicing surface, and a slice starting point, at which a front end of the angled surface of the knife contacts the slicing surface of the organism specimen at a prescribed angle and starts the slicing, by moving a center of the close roller to and away from the slice starting point so as to allow a tip part of the tissue section curling to an outside of the slicing surface of the organism specimen contact one side of the film;

means for adjusting temperature between the organism specimen and the film so as to make the tip part of the tissue section, which has been contacted the outside of the film, adhesively but on the film; and

means for slicing the tissue section by moving the organic specimen, in a prescribed direction, in a state of holding the close roller and the knife at prescribed positions and for running the film at a speed in synchronism with a slicing speed of the tissue section so as to adhere the entire tissue section cut off from the organism specimen onto the one side of the film.